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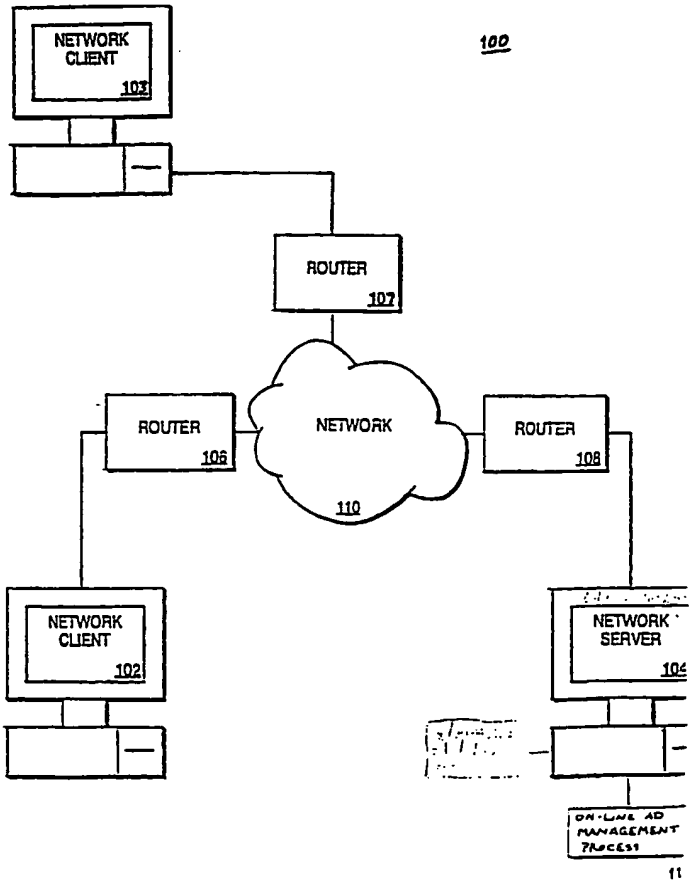
[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR INTEGRATED SCHEDULING AND ADVERTISING CONTENT MANAGEMENT PROGRAMS



(57) Abstract: A system and method for integrating content management and advertising scheduling as part of an online marketing campaign (100) is described. The system includes an advertising scheduling module for generating an advertising production schedule and task list in response to a request for an advertising campaign. The advertising schedule module can update the project information based upon inputs from advertising agency members (102) and clients (103) inputting information from remote computers, as well as information input from a content manager module.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

System and Method for Integrated Scheduling and Advertising Content Management Programs

FIELD OF THE INVENTION

The present invention relates generally to electronic commerce, and specifically to enterprise management for on-line advertising and marketing campaigns. More specifically, the present invention includes a system and method for generating a dynamic scheduling program which may be integrated with content management programs for an on-line advertising campaign.

BACKGROUND OF THE INVENTION

Advertising management is a significant and increasingly critical component of commerce that is conducted over the Internet. Effective advertising requires the collaboration of organizations that provide complementary services, thus allowing these companies to streamline their business processes and focus on their core competencies. The extended enterprises formed by such collaborative relationships are realizing that fully automated and flexible business processes that connect advertisers, their clients, and the clients' customers along the value chain result in quicker responsiveness to the changing needs of the customers and, ultimately, to greater profitability.

In on-line advertising and electronic commerce, it is becoming increasingly possible to manage revenue across the value chain. For example, an advertiser (whether an internal department of the client or an outside advertising agency) can obtain a distinct competitive advantage if it can link campaign content management to scheduling and accounting information in its systems. From a control perspective, integrating business processes can improve on-line campaign management by merging the benefits of an on-line advertising

scheduling and production process with the advantages of a dynamic content management system. In addition, by automating the process of managing and executing on-line marketing activities, both in terms of production and content, the advertiser enhances its ability to identify and focus on those cases that require and deserve special attention.

Advertising campaigns typically involve a series of distinct yet related tasks performed by a team of professionals to generate and update advertisements. Managing the production and content of such advertising represents a significant activity that requires a certain investment in resources to ensure that the advertising is targeted to the right audiences. The advertising professionals (whether part of an outside advertising agency or internal to the advertising company) must be able to respond quickly to input from the client, offering quick communication capabilities about the status of the advertisement production and placement. Likewise, the advertising professionals need to be able to get feedback from the client and/or third parties about the placement of the advertisements in order to modify and fine tune the advertising campaigns (and, as a result to modify the scheduling associated with generating the campaigns).

While the broadest scope of the present invention includes the integration of content management and scheduling for advertisement for use in a variety of different advertising media (e.g., television, radio, etc.) Such needs are particularly pronounced in the context of internet advertising. Internet advertisements typically take the form of "banner" advertisements comprising a banner message that pops up and is displayed on a vendor's web page. Banner-based advertising has become a very popular medium for

advertisers wishing to reach consumers over the Internet. Banner based advertising has the further advantage of providing feedback to the advertiser and/or client in terms of the popularity of a particular advertisement, and the resulting effect in terms of sales by the client.

There are presently a number of products that attempt to manage advertising generation and placement. These products typically involve simple advertising scheduling management programs (regardless of advertising media) which allow for the tracking of various tasks necessary to the generation of an advertising campaign. Also known are various types of content management programs which offer certain feedback on the placement of advertisements in order to improve the return on investment of a client's advertising campaign. Current products and systems for managing Internet based advertising systems are generally unable to provide the flexibility, performance, and robustness required to manage truly effective advertising campaigns including dynamic implementation for advertising creation scheduling integrated with content management.

SUMMARY AND OBJECTS OF THE INVENTION

It is an object of embodiments of the present invention to provide a system that allows for advertiser to integrate the scheduling of on-line advertising generation and the management of advertising content.

A further object of the present invention is to allow for the advertiser and potentially the client to integrate the scheduling and content management for an advertising piece for use on-line or in other advertising media.

Another object of some of the preferred embodiments of the present inventions is to provide dynamic scheduling standards in the generation of an on-line advertising campaign which can immediately re-order the flow of work and insert new tasks based upon input from the client or a third party.

It is a further object of embodiments of the present invention to provide a system that allows the automatic notification and status updating of tasks within an advertising project to multiple professionals within the advertising team.

It is yet a further object of embodiments of the present invention to provide a system that allows the scheduling of an advertising generation process by a advertiser while allowing input and content viewing from the client, whereby information received from the client, the advertiser or a third party can dynamically reconfigure the advertisement generation process.

A system and method for providing integrated content management and scheduling programs in an on-line advertising campaign is described.

The system of the present invention typically includes a server computer, typically operated on behalf of an advertising agency for storing and maintaining files being generated on behalf of a client as part of the advertising generation process. The advertising agency server is operatively connected to one or more client computers, as well as a content management server which accesses the advertisements themselves, as well as optional notes

and comments related to such advertisements. The advertising agency server also includes a scheduling module which is connected to multiple nodes or computers operated by various professionals within the advertising agency. The scheduling module, among other things, generates a schedule, task list, and/or time table in response to an input reflecting a request by a client for the generation of an advertising campaign. The scheduling module preferably notifies (e.g., via email) the various advertising professionals responsible for the tasks in the advertising campaign generation, and further updates such notifications based upon input from the advertising professionals through the nodes (e.g., reflecting completion of a task).

The system and process of the present invention further comprises a content management module operatively connected to the scheduling module. The content management module allows the client or one member of the advertising agency team to analyze not only the progress of advertisement production, but also to view instantly the content in progress as well. In one alternative embodiment of the present invention, input to the content management module (whether from the client, some member of the advertising agency team, or some other third party) can be routed to dynamically retask the flow of work dictated by the scheduling module and/or to insert new tasks associated with an particular advertising production project.

Other features and advantages of the present invention will be apparent from the accompanying drawings and from the detailed description that follows.

DEFINITION OF THE TERMS

The following terms are used in the claims of the patent as filed and are intended to have their broadest meaning consistent with the requirements of law.

Advertising agency: a team of advertising professionals working either independently or as a department of a client who are responsible for generating or modifying a advertising campaign in response to one or more requests by a client.

Client: a company who advertises on the Internet and engages an advertising agency or similar professionals in order to generate advertisements on its behalf.

Scheduling Module: a software program that classifies and/or stores requests on a project for generating advertisements and generates or modifies a task list or schedule in response to such requests.

Content Management Module: a software program that receives input from a client, a member of an advertising agency, or a third party, and generates, modifies and or stores banners and related information in response to such input. This module may further be responsible for sending information to the scheduling module in response to such input.

Banner: a piece of content or information that describes an advertisement. Examples of a banner include: a string of text, a GIF image, or other rich media contents, such as Flash, Shockwave, etc.

Where alternative meanings are possible, the broadest meaning is intended. All words used in the claims are intended to be used in the normal, customary usage of grammar and the English language.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention is illustrated by way of example and not limitation in the figures of the accompanying drawings in which like references indicate similar elements, and in which:

Figure 1 illustrates a computer network that includes client computers coupled to a server computer, and that is used to implement embodiments of the present invention;

Figure 2 illustrates a block diagram of a computer or server that execute one or more modules comprising aspects of the present invention;

Figure 3 illustrates an example GUI showing the sliding navigation bar feature of a first preferred embodiment of the present invention;

Figure 4 illustrates an example GUI showing an input screen reflecting a client request in the scheduling module in a preferred embodiment of the present invention;

Figure 5 illustrates an example GUI showing a production department input screen for generating a schedule or task list based upon a client request; and

Figure 6 is an illustration of a schedule or task list in accord with a preferred embodiment of the scheduling software of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention that is the subject of the present application is one of a series of applications dealing with on line advertising campaign management, the other copending applications including applications entitled "SYSTEM FOR PROVIDING ENTERPRISE REVENUE MANAGEMENT FOR ON-LINE ADVERTISING CAMPAIGNS" filed July 12, 2000, "SYSTEM AND METHOD FOR A USER OPT-IN ASPECT WITHIN AN

ADSERVER DECISION MAKING PROCESS" filed July 14, 2000, and "OVERLAY GENERATION," filed August18, 2000, such applications being assigned to the assignee of the present invention. Those applications are hereby incorporated by reference into the present application.

In the following description, for purposes of explanation, numerous specific details are set forth in order to provide an understanding of the present invention. It will be evident, however, to one skilled in the art that the present invention may be practiced without the specific details. In other instances, well-known structures and devices are shown in block diagram form to facilitate explanation. The description of preferred embodiments is not intended to limit the scope of the claims appended hereto. In addition, future and present alternatives and modifications to the preferred embodiments described below are contemplated. Any alternatives or modifications which make insubstantial changes in function, in purpose, in structure, or in result are intended to be covered by the claims of this patent.

Hardware Overview

Aspects of the present invention may be implemented on one or more computers executing software instructions. According to one embodiment of the present invention, one or more server computer(s) transmit and receive data over a computer network or standard telephone line. The steps of accessing, downloading, and manipulating the data, as well as other aspects of the present invention are typically implemented by a central processing unit (CPU) in the server computer executing sequences of instructions stored in a memory. The

memory may be a random access memory (RAM), read-only memory (ROM), a persistent store, such as a mass storage device, or any combination of these devices. Execution of the sequences of instructions causes the CPU to perform steps according to embodiments of the present invention.

The instructions may be loaded into the memory of the advertising agency server computer from a storage device, or from one or more other computer systems over a network connection. For example, a client computer may transmit a sequence of instructions to the server computer in response to a message transmitted to the client over a network by the server. As the server receives the instructions over the network connection, it stores the instructions in memory. The server may store the instructions for later execution, or it may execute the instructions as they arrive over the network connection. In some cases, the instructions may not be directly executable by the CPU, and may instead be executed by an interpreter that interprets the instructions. In other embodiments, hardwired circuitry may be used in place of, or in combination with, software instructions to implement the present invention. Thus, the present invention is not limited to any specific combination of hardware circuitry and software, nor to any particular source for the instructions executed by the server or client computers.

Figure 1 illustrates a computer network system 100 that implements one or more embodiments of the present invention. In system 100, a advertising agency network server computer 104 is coupled, directly or indirectly, to one or more network client computers or nodes 102 and 103 through a network 100. Alternatively, one or more of the client

computers or nodes made comprise third party systems for sending data to the advertising server in order to provide market feedback so as to update the advertisement generation process. For instance, the third party feedback could include responses to test marketing efforts by the advertising agency so as to further adjust and fine tune banners.

Likewise, it should be understood that what is referred to as client computers 102, 103 will also include one or mode computers or nodes belonging to various advertising professionals who are working with advertising content and project data located on the advertising server. The network interface between server computer 104 and client computer 102 may also include one or more routers, such as routers 106, 107, and 108. The routers serve to buffer and route the data transmitted between the server and client computers. Network 110 may be the Internet, a Wide Area Network (WAN), a Local Area Network (LAN), or any combination thereof.

In one embodiment of the present invention, server 104 in network system 100 is a server that executes an content management module 112 and advertising scheduling process module 114. Content management module 112 transmits and receives data from various other client computers, such as network clients 102 and 103, and processes the received data to process requests received over network 110. Content management module 112 may represent one or more executable program modules that are stores within network server 104 and executed locally within the server. Alternatively, however, on-line advertising management process 112 may be stored on a remote storage or processing device coupled to server 104 or network 110 and accessed by server 104 to be locally executed. In a further

alternative embodiment of the present invention, content management module 112 may be implemented in a plurality of different program modules, each of which may be executed by two or more distributed server computers coupled to each other, or to network 110 separately.

Likewise, advertising scheduling module 114 transmits and receives data from various client computers, such as network clients 102 and 103, and processes the received data to process requests received over network 110. Advertising scheduling module 114 may represent one or more executable program modules that are stores within network server 104 and executed locally within the server. Alternatively, however, advertising scheduling module 114 may be stored on a remote storage or processing device coupled to server 104 or network 110 and accessed by server 104 to be locally executed. In a further alternative embodiment of the present invention, content management module 112 and advertising scheduling module may be implemented in a plurality of different program modules, each of which may be executed by two or more distributed server computers coupled to each other, or to network 110 separately.

In one embodiment of the present invention, wherein network 110 is the Internet, network server 104 also executes a web server process (not shown to avoid obscuring the illustration) to provide HTML documents to client computers coupled to network 110. To access the HTML files provided by server 104, client computer 102 and/or 103 run a web client process (typically a web browser or similar graphical user interface) that accesses and provides links to web pages available on server 104 and other Internet server sites. It should

be noted that a network system 100 that implements embodiments of the present invention may include a larger number of interconnected client and server computers than shown in Figure 1.

Figure 2 is a block diagram of a representative networked computer, such as advertising agency server computer 104 illustrated in Figure 1. The computer system 200 includes a processor 202 coupled through a bus 201 to a random access memory (RAM) 204, a read only memory (ROM) 206, and a mass storage device 207. Mass storage device 207 could be a magnetic disk, optical compact disk, or tape drive for storing data and instructions. A display device 220 for providing visual output is also coupled to processor 202 through bus 201. Keyboard 221 and cursor control unit 222 are coupled to bus 201 for communicating user commands to processor 202.

Also coupled to processor 202 through bus 201 are additional ports, such as audio output port 224, an input/output (I/O) interface 225, and a network interface device 223. Network interface device 223 provides a physical and logical connection between computer system 200 and a network. It is used by various communication applications running on computer 200 for communicating over the network medium and may represent devices such as an Ethernet card, ISDN card, modem, or similar devices. It should be noted that the architecture of Figure 2 is provided primarily for purposes of illustration and that a server or client computer used in conjunction with the present invention is not limited to the specific architecture shown.

In one embodiment of the present invention, processor 202 within computer system 200 executes one or more software routines that comprise an on-line advertising management process 203 and an advertising scheduling process that is implemented by one or more advertising agency server computer such as server 104 in Figure 1.

Integrated Advertising Scheduling and Content Management Functionality

Figures 3 through 6 display a series of graphical interfaces which relate to the process generated by the advertising scheduling module 114 of figure 1. Turning first to figure 4, the first step in the process is for an account manager to request that work begin on a project based upon a successful pitch to an advertising client. This entry is typically made by an advertising professional on computer 102, although the present invention also envisions requests made directly by the client on computer 102 to update or add to advertising campaigns. The advertising scheduling module 114 then receives the request from computer 102 and forwards notification (preferably an email notification) of the request to a client computer operated by an advertising agency's production department. The preferred request entry screen shown in figure 4 includes an entry for directing the request to the appropriate personnel in order to further process and act upon the request.

Upon receiving the request, an advertising professional (e.g., someone in the production department of an advertising agency) preferably accesses the advertising scheduling module 114 to set up a project, or job, which in essence formalizes the request to begin work. As the display in figure 5 shows, this step in the process may include entries for establishing various aspects of the project, such assigning an account manager, an

account group, a production manager, a budget limit. This step in the process may also include identifying the client, product and brand for whom the project is being performed, as well as identifying the job type and description being performed. Most preferably, this step in the process allows the person accessing the advertising scheduling module 114 to search the available key words for selection. Such projects would likely be stored in memory either on the server 104 or at a remote location, and would provide a pull-down menu of defined key words for a topic as well as hierarchies related to those words. For example, if a person entering the selection of a job type was unsure of the entries available, he or she could "pull down" the available list of job types and select the one closest to the type of request being processed.

Once the request has been processed, the advertising scheduling module generates a standard schedule for review and modification by the advertising agency. One such example of a preferred standard schedule is shown in Figure 6. Once the standard schedule is generated, the tasks comprising the project are assigned to various people in the advertising agency with preselected due dates. **A further preferred embodiment of the present invention includes not only standard set of tasks, but also to generate standard, or default task durations. This aspect would also allow the advertising agency to record the task duration on a given project so as to automatically modify the "default" task duration based upon such prior task durations, using the median or average or comparable past task durations.** Members of the advertising agency can access the advertising scheduling module 114 through a computer 102 and pull up the standard

schedule, customizing the schedule as needed (e.g., re-ordering work, adding tasks, deleting tasks, etc.) through the use of up/down or delete/add functions. Typically, as shown for example in Figure 6, many of the tasks are interdependent (e.g., a storyboard typically is generated before casting, which is completed before any photo shoot), so the advertising scheduling manager provides entries for an advertising agency member to indicate that a task has been completed. As the tasks in the project are completed or "checked off," the advertising scheduling module 114 generates notifications, preferably email notifications, which are then served upon the appropriate computers 102, 103 operated by the advertising agency personnel responsible for the subsequent tasks in the project. Thus, the advertising scheduling module provides a truly dynamic scheduling process for adjusting and updating the task list associated with a particular project.

Another facet of the present invention involves the integration of the advertising scheduling module 114 with a content management module 112. One example of a preferred embodiment of such a content management module is shown for instance, in the campaign manager discussed and disclosed in the "Overlay Generation" application filed August 18, 2000 and assigned to the assignee of the present invention. Alternatively, the present invention could include known, "canned" general content management programs currently available, such as IBM's Content Manager™ program. By integrated, the inventor does not intend to apply some specific physical relationship between the two modules – these two modules may or may not be distinct (as opposed to one combined program), and they may or may not reside on the same computer or server. The attribute imputed by integrating

the two modules for purposes of practicing the present invention is that there be some communication between the two modules, whether for purposes of linking the content in progress of a particular advertisement with the associated tasks for a particular project, or whether the two modules are linked in order to provide feedback for generating, updating and/or modifying a project schedule based upon requests for updates or modifications to the advertising content.

In one preferred embodiment of the present invention, the advertising scheduling module further preferably accesses a search and retrieval engine to let a user quickly locate information and materials using a variety of search techniques including Boolean, key word and full-text searches. The results, which preferably include both project files and their associated advertising contents (banners) can be viewed onscreen either as thumbnails or full-format proxies and then reused as needed.

The interdependence between the content manager module and the advertising scheduling module has the further benefit of being able to store and send advertising work product to the client without having to generate physical copies of the advertisements. The client, by accessing through a computer 102 to the server 104 can view and comment upon the banner in progress. Alternatively, the client can be notified manually by the advertising agency via email, or automatically via email generated by the advertising scheduling module 114 to show updates in the banner.

In certain embodiments of the present invention, the content manager module 112 can input data to the advertising scheduling module 114 in order to update the task list and/or

generate new requests for projects based upon events processed by the content manager module. Events to be processed by the content manager module 112 can include but are not limited to inventory and other backend events, click-through events showing responses to banners placed upon a vendor's website. These and other events received by an enterprise resource planning module such as a content manager module 112 can provide input to the advertising agency about the effectiveness of a banner placement. For instance, the level of consumer response, as reflected by the number of click-throughs on a banner and the resulting number of purchases of a produce being advertised can be forwarded to a advertising scheduling module 114 to let an advertising agency know that an ad is effective and, therefore, that its placement and distribution should be continued or increased. Alternatively, in the context of a test placement of a banner, the content manager could provide more detailed information about the preferences and interests of a consumer clicking on a banner, thus, providing information for the advertising agency to update its task lists for the project corresponding to the banner so as to modify and better target the banners/advertisements that are the subject of the advertising campaign. Another example of the interactivity of the content manager module and the software scheduling module could be simply a notification of a change in price level or inventory level so as to adjust the content and targeting of the banner being developed by the advertising agency. Thus, input from the content manager module could be sent on a real time basis to the advertising scheduling module so as to dynamically reconfigure the content and targeting of the banner (and, therefore, potentially altering the scheduling and task lists of the project).

Likewise, the integration of the content manager module 112 and advertising scheduling module 114 can improve the information flow from the client to the advertising agency. The advertising scheduling module provides the capability for the client to view the status of the project and the content of the advertisement that is the subject of the project. In an alternative embodiment of the present invention, the client can use a client computer to access information not only about the status of the project and the current content of the banner, but also the content of previous versions of the banner. Thus, a person operating computer 102 (whether a client or a member of the advertising agency) could operate the advertising scheduling module to view previous iterations of the banner in order to track the progress of the project.

The navigation of the advertising scheduling module 114 for accessing status information and banner content is most preferably implemented with the use of a sliding navigation bar, as shown, for example, in Figure 3. This navigational tool gives the user of the client computer 102 (in the case of this tool typically an advertising agency member) the ability to perform any tasks enabled through on the advertising agency server 104, and to analyze any reports enabled by the advertising agency server 104, while still being capable of sliding out of the way in order to allow the user maximize screen space while any work is being performed. Thus, the navigation bar feature of advertising scheduling module 114 provides an optimal balance of describing the advertising project status and capabilities while still permitting optimal screen space for the advertising agency member to perform any necessary tasks under the project.

In the foregoing, a system and method has been described for integrating advertising scheduling and content management features of an online advertising campaign. Although the present invention has been provided with reference to specific exemplary embodiments, various modifications and changes may be made to these embodiments without departing from the broader scope and spirit of the invention as set forth int eh following claims. Accordingly, the specification and drawings are to be regarded in a illustrative rather than a restrictive sense.

CLAIMS

What is claimed is:

1. A method for generating a dynamic schedule for producing an advertisement, said method comprising the steps of:

(a) generating a task list in response to a client request for an advertising campaign;

(b) receiving real time information from a content managing module; and

(c) updating said task list based upon said information from said content managing module.

2. The method of claim 1 comprising the further step of communicating with a plurality of client computers in order to perform tasks from said task list.

3. The method of claim 2 further comprising the step of further updating said task list based upon information received from at least one of said plurality of client computers.

4. The method of claim 3 comprising the further steps of notifying at least one of said plurality of client computers based upon updates to said task list.

5. The method of claim 1, wherein said advertisement in a banner for use in an on-line advertising campaign.

6. The method of claim 1, wherein said advertisement is an advertisement for use in a television advertising campaign.

7. **The method of claim 1, wherein said advertisement is an advertisement for use in a radio advertising campaign.**

8. A system for generating a dynamic schedule for producing an online advertising campaign, comprising:

(a) an advertising scheduling module for generating a group of tasks pursuant to producing an online advertisement, said advertising scheduling module being located on a server computer;

(b) at least one computer operatively connected to said advertising scheduling module, said computer performing at least a portion of said group of tasks for generating an online advertisement in response to tasks generated by said advertising scheduling module; and

(c) a content management module communicating with said advertising scheduling module, said content management module sending information to said advertising scheduling module whereby the advertising scheduling module modifies said group of tasks for producing an online advertisement.

9. The system for generating a dynamic schedule for producing an online advertising campaign of claim 5, wherein said content management module is located on the same server as said advertising scheduling module.

10. The system for generating a dynamic schedule for producing an online advertising campaign of claim 5 further comprising at least one computer operatively

connected to said server computer for viewing the group of tasks and advertising content associated with said dynamic schedule for producing an online advertising campaign.

11. The system for generating a dynamic schedule for producing an online advertising campaign of claim 5, wherein said computer performing at least a portion of said group of tasks for generating an online advertisement receives notices from said advertising scheduling module reflecting modifications to said group of tasks for producing an online advertisement.

12. A method for generating a dynamic schedule for producing a banner, said method comprising the steps of:

(a) generating a task list for producing a banner;

(b) receiving real time information from a content managing module;

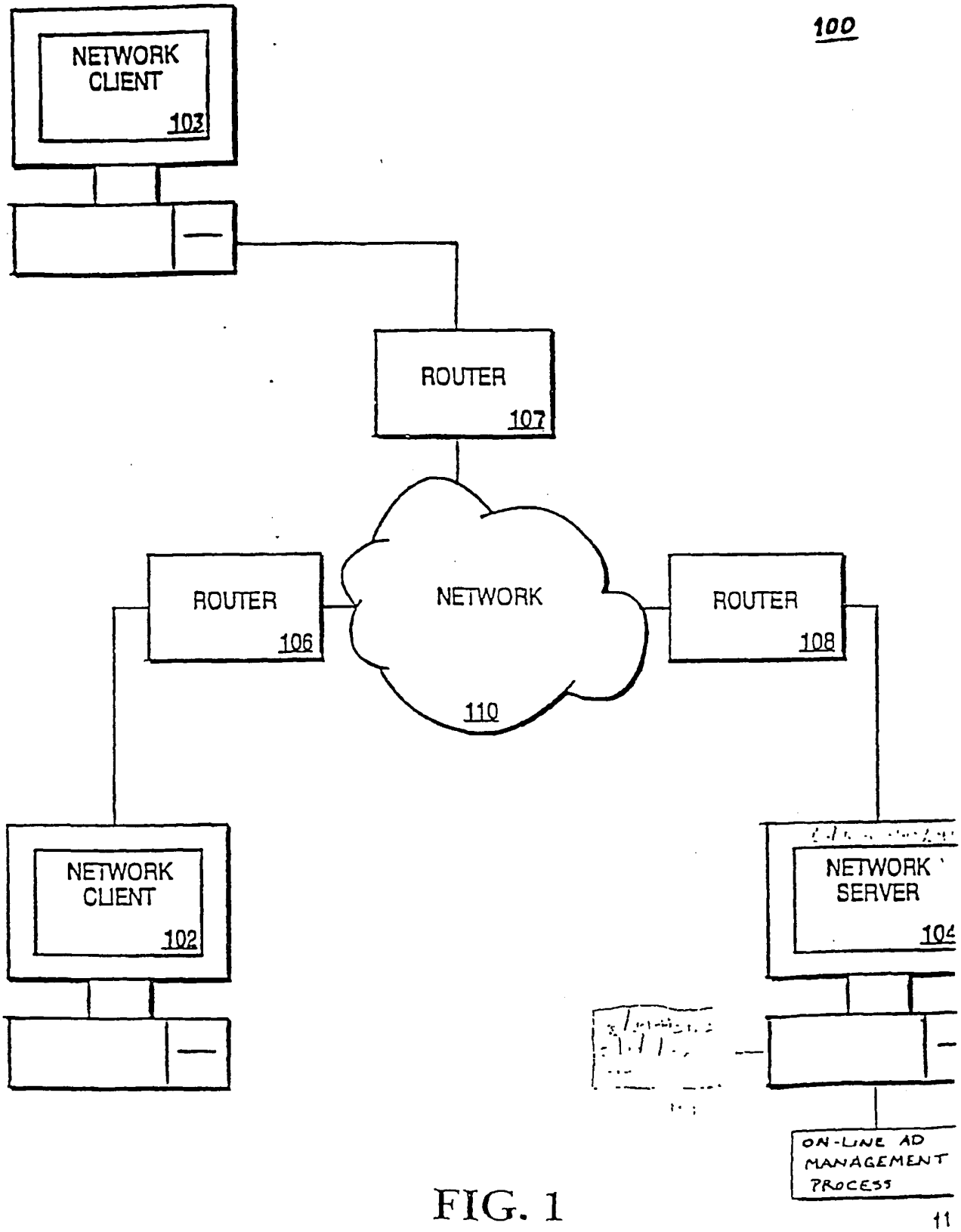
(c) communicating with a plurality of computers in order to perform tasks from said task list; and

(d) updating said task list based upon information from said content managing module and from said plurality of computers.

13. The method for generating a dynamic schedule for producing a banner of claim 9, said method comprising the further step of notifying said plurality of computers about updates to said task list.

14. The method for generating a dynamic schedule for producing a banner of claim 9 further comprising the step of communicating with a client operated computer in order to display said banner being produced.

15. The method for generating a dynamic schedule for producing a banner of claim 9 comprising the further steps of displaying said banner being produced on the internet.


100
NETWORK CLIENT
103
ROUTER
107
ROUTER
106
NETWORK
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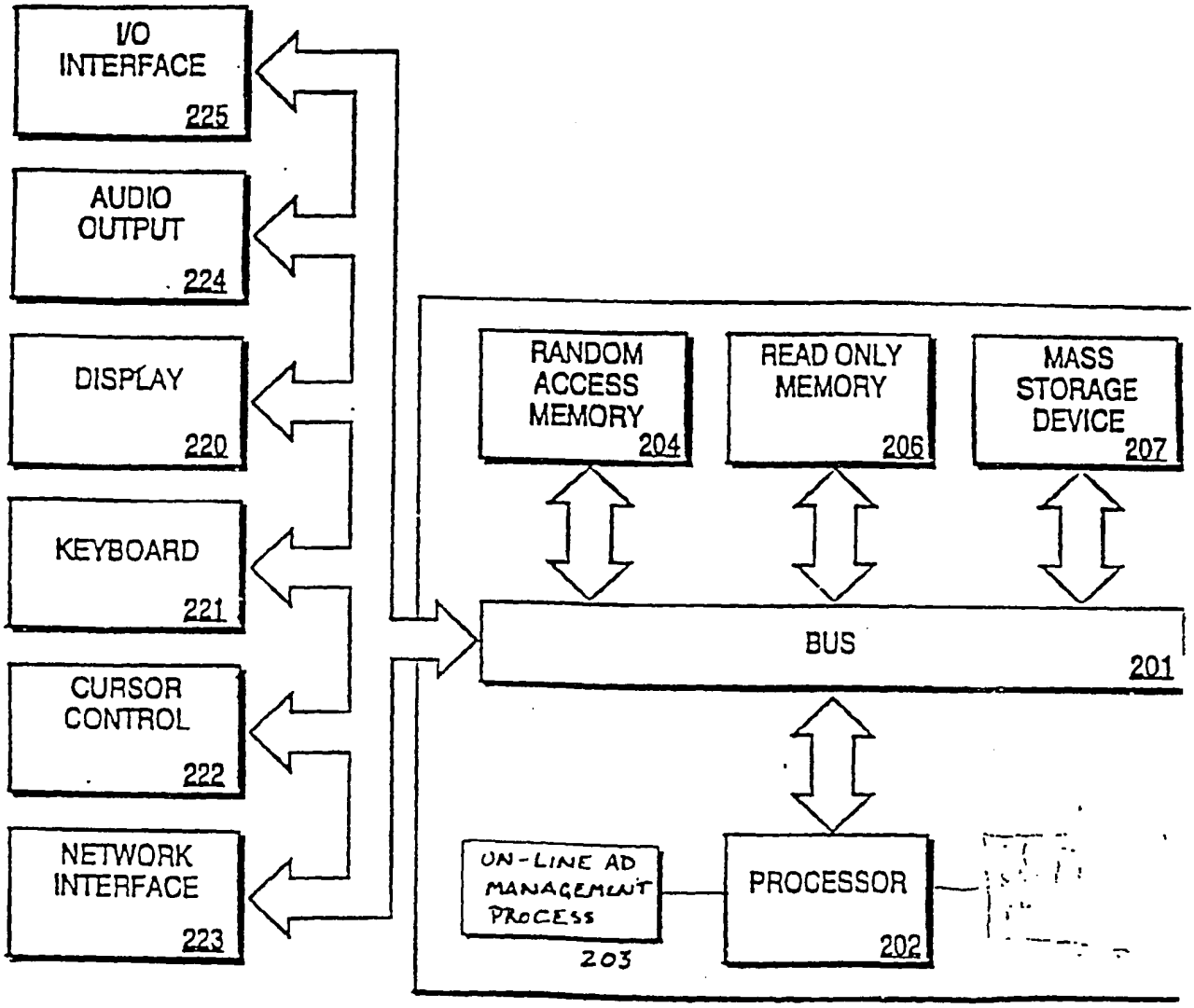
ROUTER
108
NETWORK CLIENT
102
NETWORK SERVER
104
ON-LINE AD MANAGEMENT PROCESS
11

FIG. 1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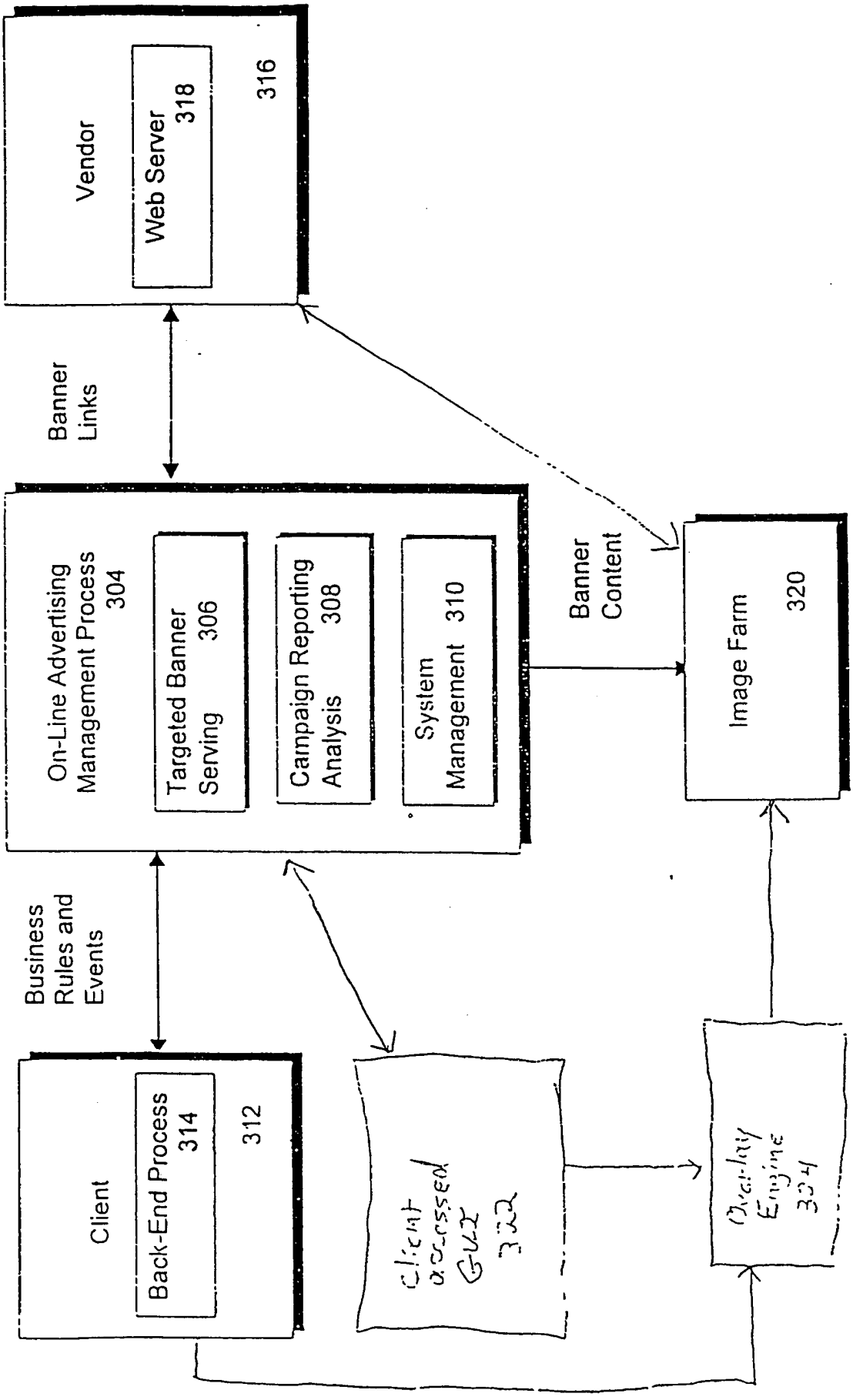
AUDIO OUTPUT 224
DISPLAY 220
KEYBOARD 221
CURSOR CONTROL 222
NETWORK INTERFACE 223
RANDOM ACCESS MEMORY 204
READ ONLY MEMORY 206
MASS STORAGE DEVICE 207
BUS 201
ON-LINE AD MANAGEMENT PROCESS 203
PROCESSOR 202

FIG. 2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Web Server
318
Banner
Links
On-Line Advertising
Management Process
304
Targeted Banner
Serving
306
Campaign Reporting
Analysis
308
System
Management
310
Banner
Content
Image Farm
320
Business
Rules and
Events
Client
312
Back-End Process
314
Client
Browser
GUI
322
Business
Engine
324

FIG. 3

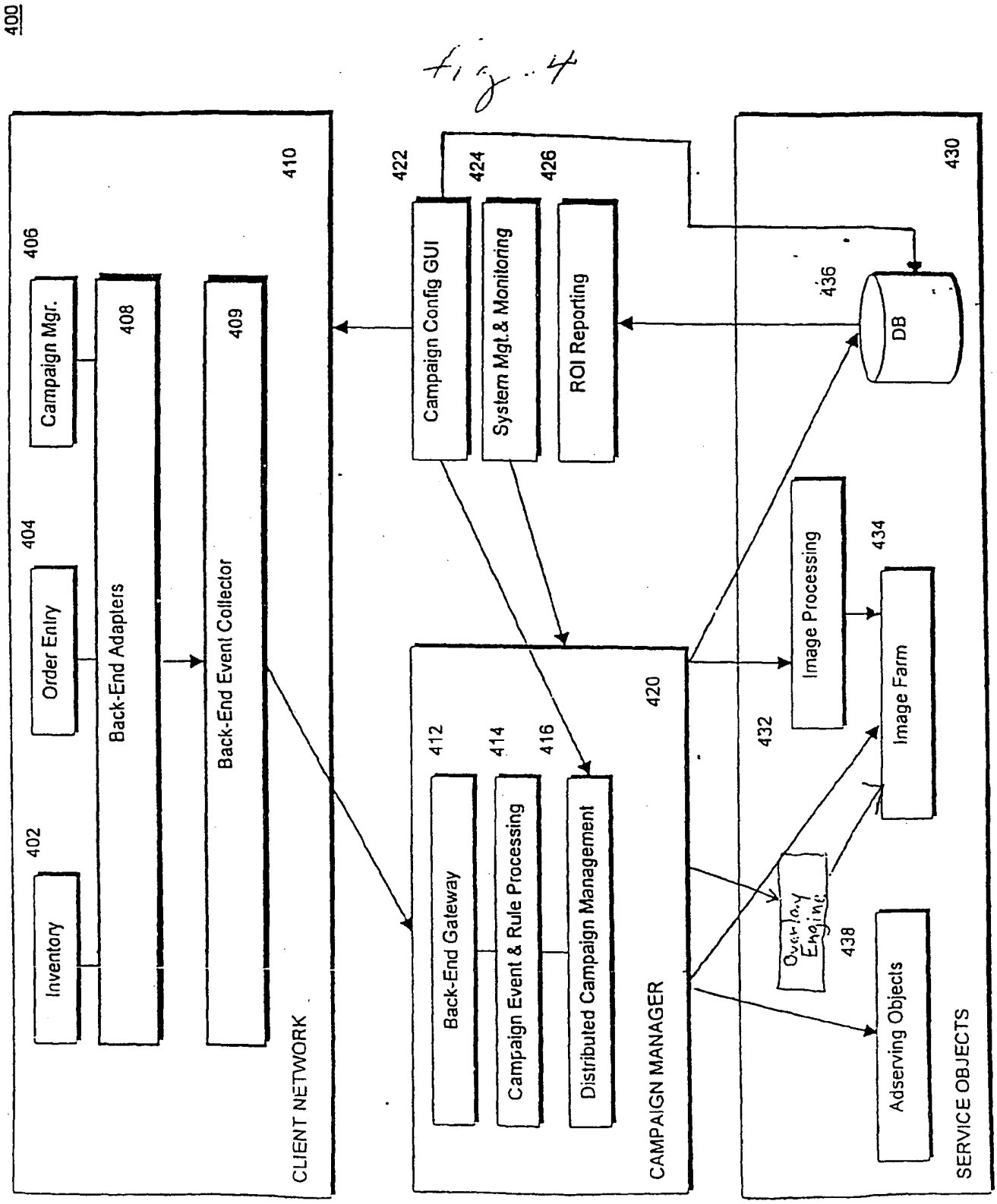
400
CLIENT NETWORK
410
406
Campaign Mgr.
404
Order Entry
402
Inventory
408
Back-End Adapters
409
Back-End Event Collector
CAMPAIGN MANAGER
420
422
Campaign Config GUI
424
System Mgt.& Monitoring
426
ROI Reporting
412
Back-End Gateway
414
Campaign Event & Rule Processing
416
Distributed Campaign Management
SERVICE OBJECTS
430
436
DB
432
Image Processing
434
Image Farm
438
Adserving Objects

fig. 4

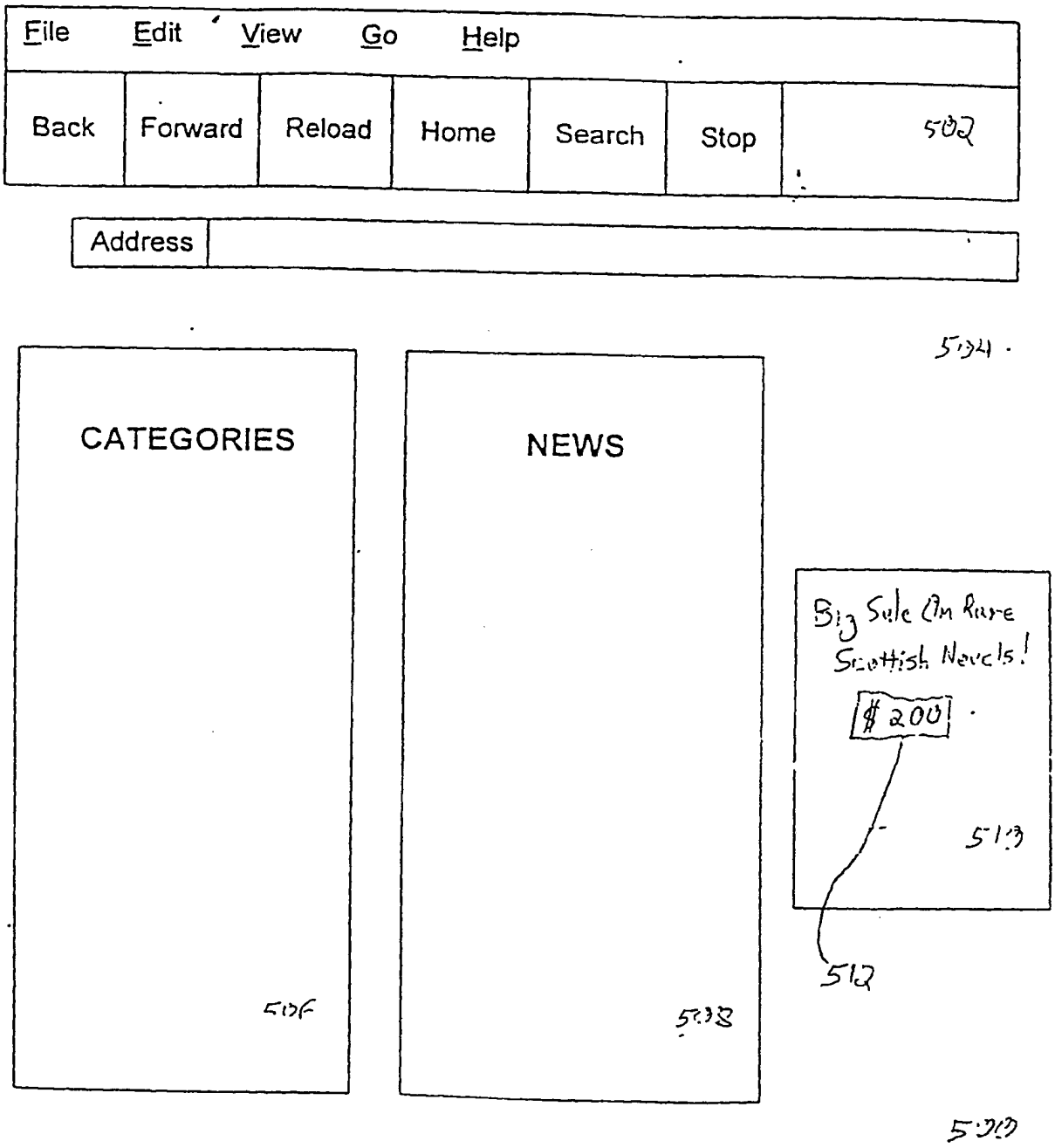
File
Edit
View
Go
Help
Back
Forward
Reload
Home
Search
Stop
502
Address
504
CATEGORIES
506
NEWS
508
Big Sale On Rare Scottish Novels!
$200
510
512

FIG. 5

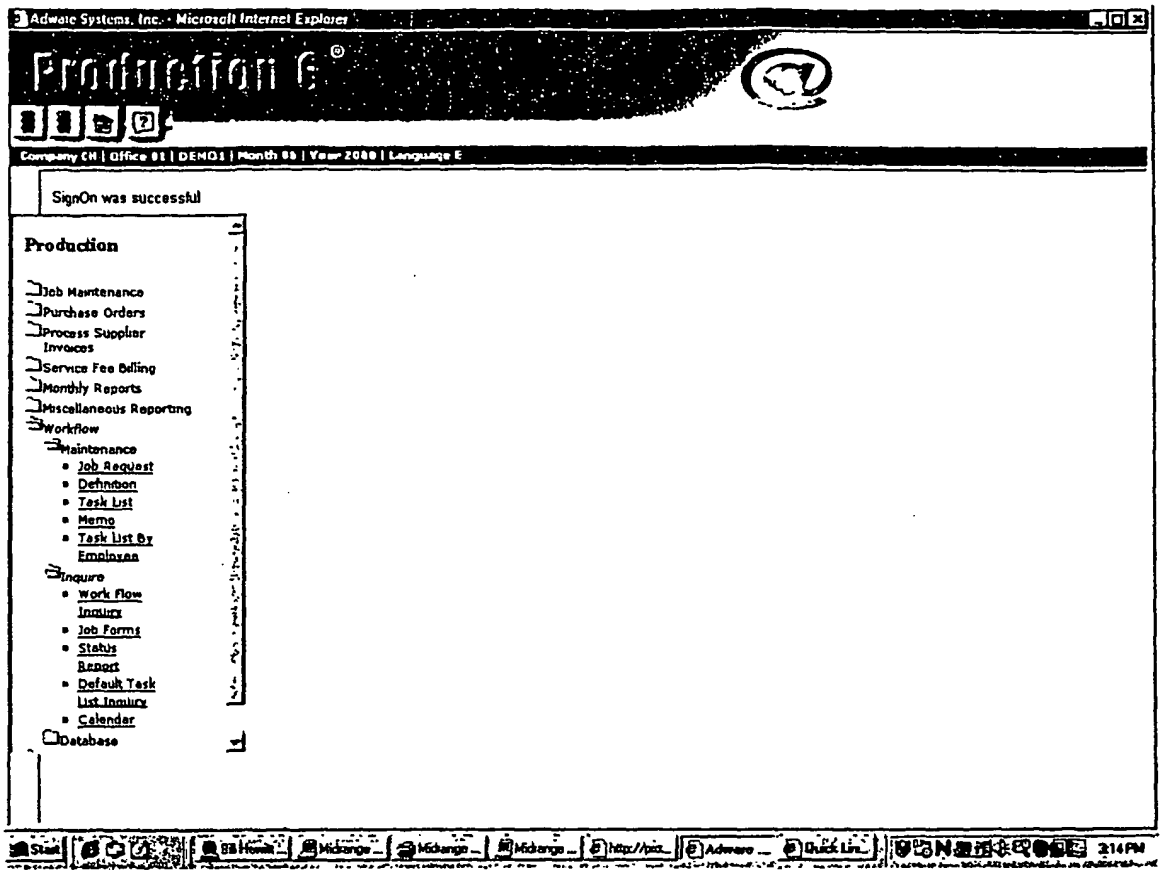
Adwaic Systems, Inc. - Microsoft Internet Explorer
Production E
Company CN | Office 01 | DEMO1 | Month 05 | Year 2000 | Language E
SignOn was successful
Production
Job Maintenance
Purchase Orders
Process Supplier Invoices
Service Fee Billing
Monthly Reports
Miscellaneous Reporting
Workflow
Maintenance
Job Request
Definition
Task List
Memo
Task List By Employee
Inquire
Work Flow Inquiry
Job Forms
Status Report
Default Task List Inquiry
Calender
Database
Start
2:14 PM

Fig 6a

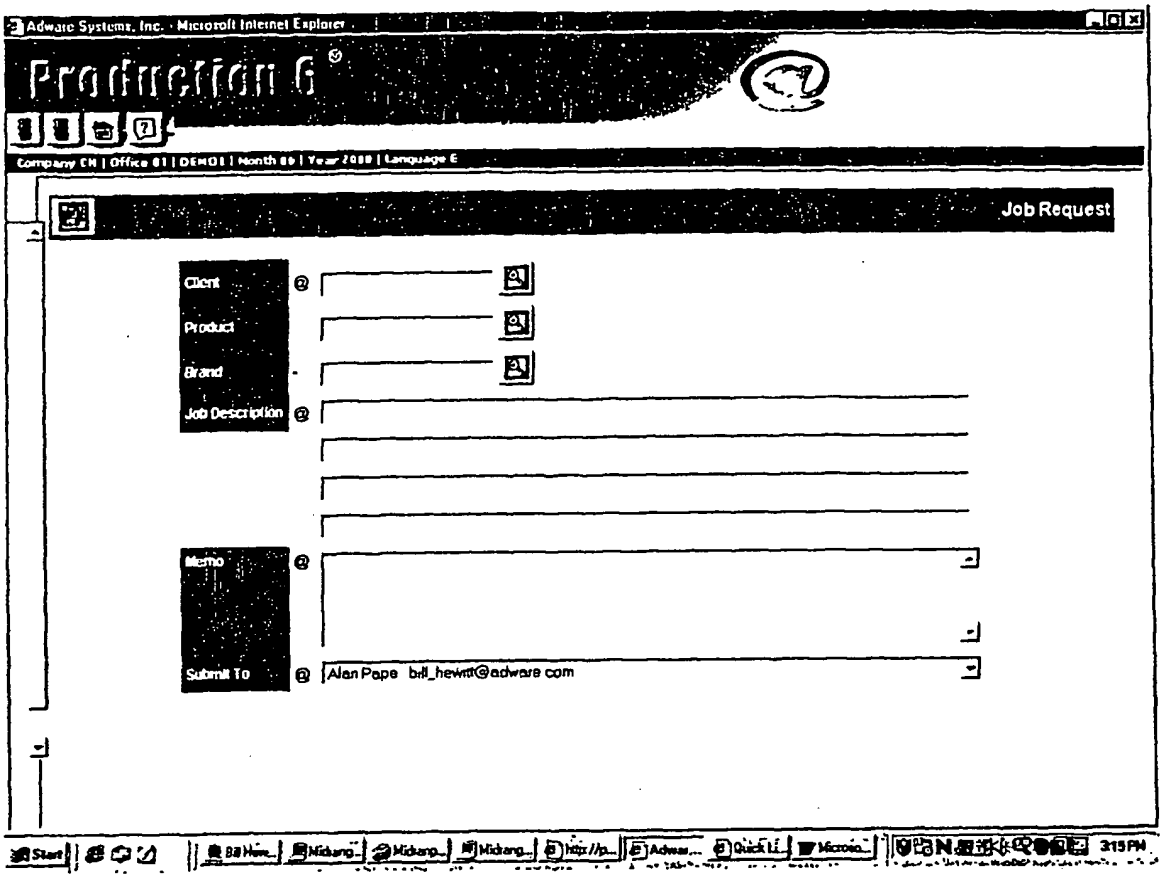
Adware Systems, Inc. - Microsoft Internet Explorer
Job Request
Client
Product
Brand
Job Description
Memo
Submit To
Alan Pope bill_hewitt@adware.com

Fig 6b

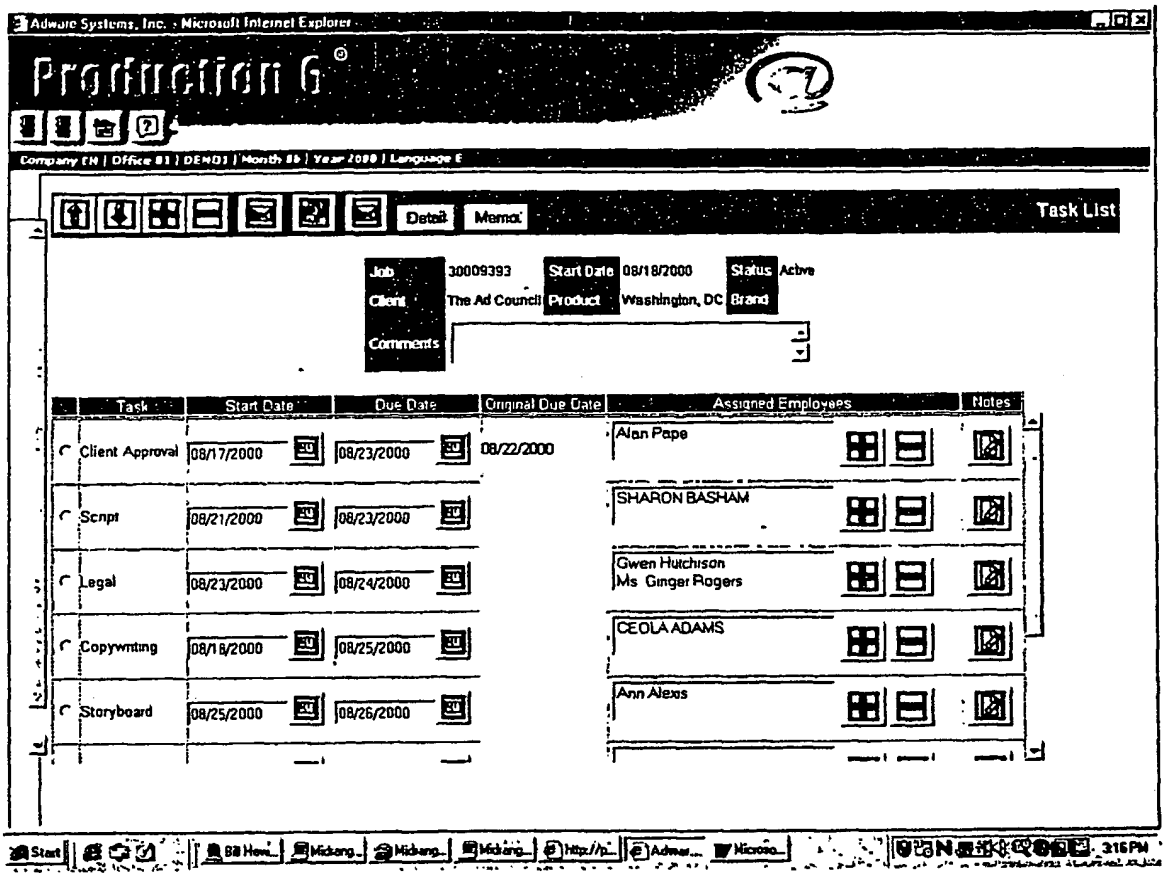
Adware Systems, Inc. - Microsoft Internet Explorer
Production G
Company EN | Office 01 | DEMO1 | Month 08 | Year 2000 | Language E
Detail
Memo
Task List
Job 30009393
Start Date 08/18/2000
Status Active
Client The Ad Council
Product Washington, DC
Brand
Comments
Task
Start Date
Due Date
Original Due Date
Assigned Employees
Notes
Client Approval 08/17/2000 08/23/2000 08/22/2000 Alan Pape
Script 08/21/2000 08/23/2000 SHARON BASHAM
Legal 08/23/2000 08/24/2000 Gwen Hutchison
Ms Ginger Rogers
Copywriting 08/18/2000 08/25/2000 CEOLA ADAMS
Storyboard 08/25/2000 08/26/2000 Ann Alexis
Start
3:16 PM

Fig. 6c

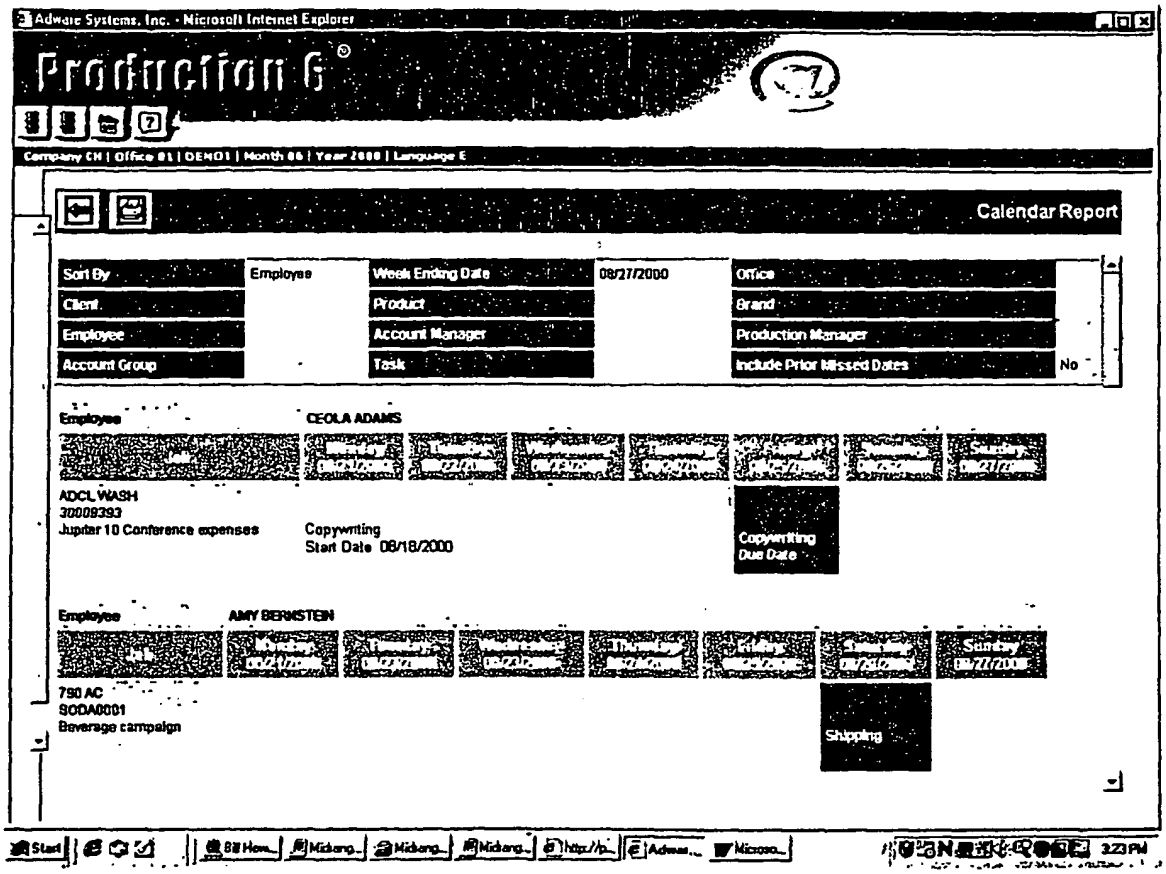
Adware Systems, Inc. - Microsoft Internet Explorer
Production 6
Company CN | Office 01 | DEMO1 | Month 08 | Year 2000 | Language E
Calendar Report
Sort By
Employee
Week Ending Date
08/27/2000
Office
Client
Product
Brand
Employee
Account Manager
Production Manager
Account Group
Task
Include Prior Missed Dates
No
Employee
CEOLA ADAMS
ADCL WASH
30009393
Jupiter 10 Conference expenses
Copywriting
Start Date 08/18/2000
Copywriting Due Date
Employee
AMY BERNSTEIN
790 AC
SODA0001
Beverage campaign
Shipping
Start
3:23 PM

Fig 6d

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US01/32926

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :G06F 17/60
US CL :705/14; 709/206

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/14; 709/206

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Microsft COMPUTER DICTIONARY

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST, WEST, DIALOG, PALM ExPo

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,809,242 A (SHAW et al) 15 September 1998, col. 10, lines 5-63.	1-15
Y	US 5,848,397 A (MARSH et al) 08 December 1998, col. 6, lines 9-60.	1-15
Y	US 5,999,912 A (WODARZ et al) 07 December 1999, col. 3, lines 32-61.	1-15

☐ Further documents are listed in the continuation of Box C ☐ See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E"	earlier document published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search	Date of mailing of the international search report
26 NOVEMBER 2001	**13 December 2001 (13.12.01)**
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer STEPHEN M GRAVINI Telephone No (703) 308-7570

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